

REMARKS/ARGUMENTS

Rejection under 35 USC 102(b)

Claims 1-7 have been rejected under 35 USC 102(b). More specifically, the Patent Office states:

Pinkel et al. teaches a set of chromosomal probes comprising a 5p chromosomal probe and a probe selected from 17q21 locus specific probe as well as 8q24 locus specific probe and chromosome 17 enumeration probe (Column 48, Table 4)...

In response to this rejection, Claim 1 has been amended to delete the recitation of probe sets explicitly taught by Pinkel et al. More specifically, Claim 1 has been amended to exclude a set of chromosomal probes comprising a set of two probes consisting of a 5p chromosome arm probe and a 8q24 locus specific probe; a 5p chromosome arm probe and a 17q21 locus specific probe; and a 8q24 locus specific probe and a chromosome 17 enumeration probe. New Claim 21 has been added to the claim set to include these deleted probe sets using partially closed language. Pinkel et al. does not specify the group of probes consisting essentially of a 5p chromosome arm probe and a 8q24 locus specific probe; a 5p chromosome arm probe and a 17q21 locus specific probe; and a 8q24 locus specific probe and a chromosome 17 enumeration probe. Applicant's new Claim 21 pertains to the selection of a particular combination of probes that identifies cancer with a high diagnostic value. Applicant has provided evidence that not all probes provide the same diagnostic values as a combination as they do alone, or in combination with any other probe. Pinkel et al. does not suggest the specific sets of probes recited in Applicant's new Claim 21, alone or together with other probes which would not materially affect the invention. As a result, the particular combinations of probes recited in new Claim 21 are not anticipated by the cited reference.

The Patent Office further states:

Pinkel et al. inherently teaches the set of chromosomal probes comprising a 5p probe, a 8q24 locus specific probe and 20q chromosomal arm probe and 7p locus specific probe (Column 48, Table 4 and Figure 17)...Although the specific numbers such as 5p15 and 7p12 are not mentioned by Pinkel et al., these probes are inherently present in the combination of probes of Pinkel et al. because 'it provides methods to determine whether there are abnormal copy numbers of nucleic acid sequences *anywhere* in the genome of a subject tumor cell.'

Applicant respectfully traverses this rejection. As stated by the Patent Office, Pinkel et al. does not teach the specific probe sets of the rejected claims. The mere fact that Pinkel et al. teaches methods to determine whether there are abnormal copy numbers of nucleic acid sequences anywhere in the genome of a subject tumor cell does not provide a proper basis for anticipating the rejected claims. As stated in MPEP 2131, for a reference to be anticipatory, "the identical invention must be shown in as complete detail as contained in the...claim (*Richardson v. Suzuki Motor Co.* 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989))." Also, MPEP 2131.02 states:

When the compound is not specifically named, but instead it is necessary to select portions of teachings within a reference and combine them, e.g., select various substituents from a list of alternatives given for placement at specific sites on a generic chemical formula to arrive at a specific composition, anticipation can only be found if the classes of substituents are sufficiently limited or well delineated (*Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990)). If one of skill in the art is able to 'at once envisage' the specific compound within the generic chemical formula, the compound is anticipated.

Applicant respectfully submits that the classes of substituents (i.e. specific probes) of Pinkel et al. are not sufficiently limited or well delineated to enable one of skill in the art to arrive at Applicant's claimed probe sets. The mere fact that Applicant's claimed probe sets hybridize to amplified loci in the genome of a subject tumor cell does not render Applicant's claimed invention unpatentable over Pinkel et al merely because Pinkel et al. provides methods for determining abnormal copy numbers of nucleic acid sequences. Knowledge of the method of

Pinkel et al., or probe sets taught therein, does not provide one of skill in the art sufficient guidance to "at once envisage" the specific probe sets of Applicant's claimed invention. As such, one skilled in the art would not be able to practice Applicant's claimed invention based on the teachings of Pinkel et al. Applicant therefore respectfully submits that independent Claim 1 as amended, and independent Claims 6 and 7 are free of the cited reference. Since dependent Claims 2-5 are dependent on a novel claim, Applicant respectfully submits that these claims are also free of the cited art.

Summary

In light of the above amendment, consideration of the subject patent application is respectfully requested. Any deficiency or overpayment should be charged or credited to Deposit Account No. 500282.

Respectfully submitted,



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